

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
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Application Serial Number: 10/519,132
Source: PCT
Date Processed by STIC: 2/21/06

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PCT

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/519,132

DATE: 02/21/2006
TIME: 12:27:06

Input Set : A:\23380-602natl.txt
Output Set: N:\CRF4\02212006\J519132.raw

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3 <110> APPLICANT: Strittmatter, Stephen
5 <120> TITLE OF INVENTION: Modulators and Modulation of the Interaction Between RGM and
6 Neogenin
8 <130> FILE REFERENCE: 23380-602NATL
10 <140> CURRENT APPLICATION NUMBER: 10/519,132
C--> 11 <141> CURRENT FILING DATE: 2004-12-22
13 <150> PRIOR APPLICATION NUMBER: PCT/US03/20147
14 <151> PRIOR FILING DATE: 2003-06-26
16 <150> PRIOR APPLICATION NUMBER: 60/392,062
17 <151> PRIOR FILING DATE: 2002-06-26
19 <160> NUMBER OF SEQ ID NOS: 2
21 <170> SOFTWARE: PatentIn version 3.2
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 1445
25 <212> TYPE: PRT
26 <213> ORGANISM: Homo sapiens
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34 Arg Arg Cys Cys Pro Pro Pro Pro Leu Leu Leu Leu Pro Leu Leu
35 20 25 30
38 Leu Leu Leu Gly Arg Pro Ala Ser Gly Ala Ala Ala Thr Lys Ser Gly
39 35 40 45
42 Ser Pro Pro Gln Ser Ala Gly Ala Ser Val Arg Thr Phe Thr Pro Phe
43 50 55 60
46 Tyr Phe Leu Val Glu Pro Val Asp Thr Leu Ser Val Arg Gly Ser Ser
47 65 70 75 80
50 Val Ile Leu Asn Cys Ser Ala Tyr Ser Glu Pro Ser Pro Asn Ile Glu
51 85 90 95
54 Trp Lys Lys Asp Gly Thr Phe Leu Asn Leu Glu Ser Asp Asp Arg Arg
55 100 105 110
58 Gln Leu Leu Pro Asp Gly Ser Leu Phe Ile Ser Asn Val Val His Ser
59 115 120 125
62 Lys His Asn Lys Pro Asp Glu Gly Phe Tyr Gln Cys Val Ala Thr Val
63 130 135 140
66 Asp Asn Leu Gly Thr Ile Val Ser Arg Thr Ala Lys Leu Thr Val Ala
67 145 150 155 160
70 Gly Leu Pro Arg Phe Thr Ser Gln Pro Glu Pro Ser Ser Val Tyr Val
71 165 170 175
74 Gly Asn Ser Ala Ile Leu Asn Cys Glu Val Asn Ala Asp Leu Val Pro
75 180 185 190
78 Phe Val Arg Trp Glu Gln Asn Arg Gln Pro Leu Leu Leu Asp Asp Arg
79 195 200 205

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82 Ile Val Lys Leu Pro Ser Gly Thr Leu Val Ile Ser Asn Ala Thr Glu
 83 210 215 220
 86 Gly Asp Gly Gly Leu Tyr Arg Cys Ile Val Glu Ser Gly Gly Pro Pro
 87 225 230 235 240
 90 Lys Phe Ser Asp Glu Ala Glu Leu Lys Val Leu Gln Asp Arg Glu Glu
 91 245 250 255
 94 Ile Val Asp Leu Val Phe Leu Met Arg Pro Ser Ser Met Met Lys Val
 95 260 265 270
 98 Thr Gly Gln Arg Ala Val Leu Pro Cys Val Val Ser Gly Leu Pro Ala
 99 275 280 285
 102 Pro Val Val Arg Trp Met Lys Asn Glu Glu Val Leu Asp Thr Glu Ser
 103 290 295 300
 106 Ser Gly Arg Leu Val Leu Leu Ala Gly Gly Gly Leu Glu Ile Ser Asp
 107 305 310 315 320
 110 Val Thr Glu Asp Asp Ala Gly Thr Tyr Phe Cys Ile Ala Asp Asn Gly
 111 325 330 335
 114 Asn Lys Thr Val Glu Ala Gln Ala Glu Leu Thr Val Gln Val Pro Pro
 115 340 345 350
 118 Gly Phe Leu Lys Gln Pro Ala Asn Ile Tyr Ala His Glu Ser Met Asp
 119 355 360 365
 122 Ile Val Phe Glu Cys Glu Val Thr Gly Lys Pro Thr Pro Thr Val Lys
 123 370 375 380
 126 Trp Val Lys Asn Gly Asp Val Val Ile Pro Ser Asp Tyr Phe Lys Ile
 127 385 390 395 400
 130 Val Lys Glu His Asn Leu Gln Val Leu Gly Leu Val Lys Ser Asp Glu
 131 405 410 415
 134 Gly Phe Tyr Gln Cys Ile Ala Glu Asn Asp Val Gly Asn Ala Gln Ala
 135 420 425 430
 138 Gly Ala Gln Leu Ile Ile Leu Glu His Ala Pro Ala Thr Thr Gly Pro
 139 435 440 445
 142 Leu Pro Ser Ala Pro Arg Asp Val Val Ala Ser Leu Val Ser Thr Arg
 143 450 455 460
 146 Phe Ile Lys Leu Thr Trp Arg Thr Pro Ala Ser Asp Pro His Gly Asp
 147 465 470 475 480
 150 Asn Leu Thr Tyr Ser Val Phe Tyr Thr Lys Glu Gly Val Asp Arg Glu
 151 485 490 495
 154 Arg Val Glu Asn Thr Ser Gln Pro Gly Glu Met Gln Val Thr Ile Gln
 155 500 505 510
 158 Asn Leu Met Pro Ala Thr Val Tyr Ile Phe Lys Val Met Ala Gln Asn
 159 515 520 525
 162 Lys His Gly Ser Gly Glu Ser Ser Ala Pro Leu Arg Val Glu Thr Gln
 163 530 535 540
 166 Pro Glu Val Gln Leu Pro Gly Pro Ala Pro Asn Ile Arg Ala Tyr Ala
 167 545 550 555 560
 170 Thr Ser Pro Thr Ser Ile Thr Val Thr Trp Glu Thr Pro Leu Ser Gly
 171 565 570 575
 174 Asn Gly Glu Ile Gln Asn Tyr Lys Leu Tyr Tyr Met Glu Lys Gly Thr
 175 580 585 590
 178 Asp Lys Glu Gln Asp Ile Asp Val Ser Ser His Ser Tyr Thr Ile Asn

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187	625	630	635
190	640		
191	Ser Asp Val Pro Ser Ala Ala Pro Gln Asn Leu Ser Leu Glu Val Arg		
194	645	650	655
195	Asn Ser Lys Ser Ile Val Ile His Trp Gln Pro Pro Ser Ser Thr Thr		
198	660	665	670
199	Gln Asn Gly Gln Ile Thr Gly Tyr Lys Ile Arg Tyr Arg Lys Ala Ser		
202	675	680	685
203	Arg Lys Ser Asp Val Thr Glu Thr Leu Val Thr Gly Thr Gln Leu Ser		
206	690	695	700
207	Gln Leu Ile Glu Gly Leu Asp Arg Gly Thr Glu Tyr Asn Phe Arg Val		
210	705	710	715
211	720		
214	Ala Ala Leu Thr Val Asn Gly Thr Gly Pro Ala Thr Asp Trp Leu Ser		
215	725	730	735
218	Ala Glu Thr Phe Glu Ser Asp Leu Asp Glu Thr Arg Val Pro Glu Val		
219	740	745	750
222	Pro Ser Ser Leu His Val Arg Pro Leu Val Thr Ser Ile Val Val Ser		
223	755	760	765
226	Trp Thr Pro Pro Glu Asn Gln Asn Ile Val Val Arg Gly Tyr Ala Ile		
227	770	775	780
230	Gly Tyr Gly Ile Gly Ser Pro His Ala Gln Thr Ile Lys Val Asp Tyr		
231	785	790	795
234	800		
235	Lys Gln Arg Tyr Tyr Thr Ile Glu Asn Leu Asp Pro Ser Ser His Tyr		
238	805	810	815
239	Val Ile Thr Leu Lys Ala Phe Asn Asn Val Gly Glu Gly Ile Pro Leu		
242	820	825	830
246	Tyr Glu Ser Ala Val Thr Arg Pro His Thr Val Pro Asp Pro Thr Pro		
247	835	840	845
250	Met Met Pro Pro Val Gly Val Gln Ala Ser Ile Leu Ser His Asp Thr		
251	850	855	860
254	Ile Arg Ile Thr Trp Ala Asp Asn Ser Leu Pro Lys His Gln Lys Ile		
255	865	870	875
258	880		
259	Thr Asp Ser Arg Tyr Tyr Thr Val Arg Trp Lys Thr Asn Ile Pro Ala		
262	885	890	895
266	Asn Thr Lys Tyr Lys Asn Ala Asn Ala Thr Thr Leu Ser Tyr Leu Val		
267	900	905	910
268	915	920	925
270	Thr Gly Leu Lys Pro Asn Thr Leu Tyr Glu Phe Ser Val Met Val Thr		
271	930	935	940
274	Lys Gly Arg Arg Ser Ser Thr Trp Ser Met Thr Ala His Gly Ala Thr		
275	945	950	955
276	Phe Glu Leu Val Pro Thr Ser Pro Pro Lys Asp Val Thr Val Val Ser		
277	965	970	975
278	Lys Glu Gly Lys Pro Arg Thr Ile Ile Val Asn Trp Gln Pro Pro Ser		
279	980	985	990

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Input Set : A:\23380-602natl.txt
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 279 995 1000 1005
 282 Arg Leu Thr His Gln Ile Gln Glu Leu Thr Leu Asp Thr Pro Tyr
 283 1010 1015 1020
 286 Tyr Phe Lys Ile Gln Ala Arg Asn Ser Lys Gly Met Gly Pro Met
 287 1025 1030 1035
 290 Ser Glu Ala Val Gln Phe Arg Thr Pro Lys Ala Leu Gly Ser Ala
 291 1040 1045 1050
 294 Gly Lys Gly Ser Arg Leu Pro Asp Leu Gly Ser Asp Tyr Lys Pro
 295 1055 1060 1065
 298 Pro Met Ser Gly Ser Asn Ser Pro His Gly Ser Pro Thr Ser Pro
 299 1070 1075 1080
 302 Leu Asp Ser Asn Met Leu Leu Val Ile Ile Val Ser Val Gly Val
 303 1085 1090 1095
 306 Ile Thr Ile Val Val Val Val Ile Ala Val Phe Cys Thr Arg
 307 1100 1105 1110
 310 Arg Thr Thr Ser His Gln Lys Lys Lys Arg Ala Ala Cys Lys Ser
 311 1115 1120 1125
 314 Val Asn Gly Ser His Lys Tyr Lys Gly Asn Cys Lys Asp Val Lys
 315 1130 1135 1140
 318 Pro Pro Asp Leu Trp Ile His His Glu Arg Leu Glu Leu Lys Pro
 319 1145 1150 1155
 322 Ile Asp Lys Ser Pro Asp Pro Asn Pro Val Met Thr Asp Thr Pro
 323 1160 1165 1170
 326 Ile Pro Arg Asn Ser Gln Asp Ile Thr Pro Val Asp Asn Ser Met
 327 1175 1180 1185
 330 Asp Ser Asn Ile His Gln Arg Arg Asn Ser Tyr Arg Gly His Glu
 331 1190 1195 1200
 334 Ser Glu Asp Ser Met Ser Thr Leu Ala Gly Arg Arg Gly Met Arg
 335 1205 1210 1215
 338 Pro Lys Met Met Met Pro Phe Asp Ser Gln Pro Pro Gln Pro Val
 339 1220 1225 1230
 342 Ile Ser Ala His Pro Ile His Ser Leu Asp Asn Pro His His His
 343 1235 1240 1245
 346 Phe His Ser Ser Ser Leu Ala Ser Pro Ala Arg Ser His Leu Tyr
 347 1250 1255 1260
 350 His Pro Ser Ser Pro Trp Pro Ile Gly Thr Ser Met Ser Leu Ser
 351 1265 1270 1275
 354 Asp Arg Ala Asn Ser Thr Glu Ser Val Arg Asn Thr Pro Ser Thr
 355 1280 1285 1290
 358 Asp Thr Met Pro Ala Ser Ser Ser Gln Thr Cys Cys Thr Asp His
 359 1295 1300 1305
 362 Gln Asp Pro Glu Gly Ala Thr Ser Ser Ser Tyr Leu Ala Ser Ser
 363 1310 1315 1320
 366 Gln Glu Glu Asp Ser Gly Gln Ser Leu Pro Thr Ala His Val Arg
 367 1325 1330 1335
 370 Pro Ser His Pro Leu Lys Ser Phe Ala Val Pro Ala Ile Pro Pro
 371 1340 1345 1350
 374 Pro Gly Pro Pro Leu Tyr Asp Pro Ala Leu Pro Ser Thr Pro Leu

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Input Set : A:\23380-602nat1.txt
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 378 Leu Ser Gln Gln Ala Leu Asn His His Ile His Ser Val Lys Thr
 379 1370 1375 1380
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 383 1385 1390 1395
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 387 1400 1405 1410
 390 Glu Asp Ser Glu Ser Ser Tyr Glu Pro Asp Glu Leu Thr Lys Glu
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 412 gccactcggt gggtagagat ggccggcgag cgccaaagccg ggcgactcct ctgcacccctcc 180
 414 tcctcccgcc gctgctgtcc gccaccgcgc ctgctgctgt tgctgccgt gctgctgtcg 240
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 418 ggagccagtg ttcaacatt cactccgtt tattttctgg tggagccgt agacaccctc 360
 420 tcagtttagag gctcttctgt tatattaaat tgctccgt attctgagcc ctctccaaac 420
 422 attgaatggaa agaaagatgg gacttttta aacttagaat cagatgatcg acggcagcta 480
 424 ctccccatgt gatctttatt catcagcaac gtgggtcatt ccaaacaaca taagcctgac 540
 426 gaaggtttct atcagtggt agccactgtg gataatcttg gaaccattgt cagcagaaca 600
 428 gccaagctca cagtagcagg tcttccaaga tttaccagcc aaccagaacc ttcttcgtc 660
 430 tatgttggaa acagtgcatt tctgaattgt gaagttaatg cagatttgtt cccatttgtt 720
 432 aggtggaaac agaatcgaca gccccttctt ctagatgaca ggattgtcaa acttccaagt 780
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 440 cagcgtcag tggccatg tggctctca gggcttcctg ctccagtcgt tagatggatg 1020
 442 aaaaacgaag aagtgcgtt cacagaaagc tctggcaggt tggcttgcgt agcaggaggt 1080
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 446 aatggaaata agacagttga agtcaggcg gagcttactg tgcaagtgc acctggatc 1200
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VERIFICATION SUMMARY

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DATE: 02/21/2006

TIME: 12:27:07

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